Demonstration and Deployment of ROSRS

Savannah River Site
In Partnership with the Office of Science & Technology

Introduction

The Savannah River Site (SRS) has identified the need for size reduction capabilities to dispose of a large and growing quantity of large contaminated equipment, provide improved second sort capabilities and to size reduce newly generated waste. A Remote Operations Size Reduction System (ROSRS) was designed and constructed at a cost of approximately $9.5 million for use at the Rocky Flats Environmental Test Site (RFETS) Closure Project to size reduce a variety of plutonium-contaminated gloveboxes.

Technical Need

SRS has identified the need or size reduction capabilities to:

- Dispose of large contaminated equipment backlog

  The SRS Solid Waste Committee has compiled a list of approximately 750,00 ft^3 of large contaminated equipment at various locations on site that requires disposition. Significant cost savings can be realized if this equipment is size reduced and/or decontaminated prior to disposal.

- Size Reduce newly generated waste

  SRS is scheduled to embark on significant Deactivation and Decommissioning (D&D) activities starting in 2010 time frame at the conclusion of Canyon Operations. These operations will generate significant quantities of contaminated equipment that will require size reduction for cost effective disposal.

Benefits

When installed, ROSRS will have a state-of-the-art reduction system with a capitalization value of approximately $11.5 million. SRS plans to use this system as follows:

Size reduction of the 120,000 ft^3 of equipment identified as direct candidates for size reduction by ROSRS would reduce the resulting disposal volume by approximately 70,000 ft^3, and reduce the cost to dispose of this material by approximately $30 million.

Installation of ROSRS at this time will afford the SRS with the opportunity to gain valuable experience on the system and be properly prepared to cost effectively address disposal of significant quantities of contaminated equipment to be generated from D&D activities starting in the 2010 time frame.

Status

SRS personnel inspected the ROSRS at the vendor's facility in December 2000. This visit confirmed tat the installation could proceed immediately in Building 105-C, which housed the exiting SRS Decontamination Facility.

In FY02, ROSRS will be installed and production operations will begin.

Project Funding (in Thousands)

Funding Source	FY01
OST	$2,000

For more information about the Demonstration and Deployment of ROSRS at the Savannah River Site, contact:

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